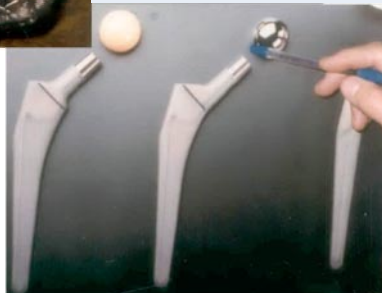


# Nanostructured Titanium Alloys for Medical Applications



- Titanium alloys widely used for medical implants and devices
- Nanostructured forms of titanium alloys offer increased strength
- Project will develop production process based on Equal Channel Angular Pressing, already demonstrated to be effective with pure titanium
- Nanostructured Ti-6Al-4V applications:
  - Implants and devices to fix broken bones
  - Implants subject to high fatigue load
  - Implants for older patients at risk of osteoporosis
- Nanostructured Ti-6Al-4V applications:
  - Bone anchors to reattach torn ligaments
  - Sutures
  - Microtubing
  - Dental drills
- Useful to other industries

**Commercialization Started**



Santa Fe, NM

Ufa State Aircraft Technical University  
Ufa, Russia

Los Alamos, NM